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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,325	07/24/2001	Yuta Ohki	010919	1391

23850 7590 12/23/2002

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EXAMINER

FORD, JOHN K

ART UNIT	PAPER NUMBER
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3743

DATE MAILED: 12/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/069,325

Applicant(s)

Ohki

Examiner

FORD

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9-13-02.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 4-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1&2 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

Please send copy of the previously sent PTO-892, listing the originally cited references, with applicant's next communication. The Examiner's file copy has not been located as of the date of this communication.

Applicant's election of the "first species" which "involves a sample temperature regulator in which a connecting plate 15 formed of a material having a thermal conductivity lower than those of the two blocks is interposed between the heating block 3 and the cooling block 4" is acknowledged. Applicant states that the elected species "is represented by the showings in all Figures 1 to 10 and is covered by claims 1 to 3 in the application".

Applicant's traverse based on the Examiner's formulated request to elect amongst Figures 1-10 is convincing since none of the claims 1-3 appear to claim sub-generic features found in those Figures. The Examiner was anticipating that such features might have been claimed in Applicant's response to the first action and with a view toward reducing the number of communications formulated the election requirement. In view of the fact that all of claims 1-3 are readable on all of Figures 1-10, the election requirement is withdrawn.

Applicant does agree that Figures 11 and 12 (covered by claims 4-6) represent another species, which, pursuant to applicant's election above, is withdrawn from consideration at this time.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tezuka et al. (4,548,259).

A "heating block" is formed by frame 13 and heater 18 and delay plate 19. Together these components form a receptacle for flow cell 12. A connecting plate 13A is positioned between and attaches the heating block (described above) to a "cooling block" 15. The connecting plate 14 has hollow recesses in it, which are filled with low conductivity materials (as disclosed in col. 4, lines 12-14 and 40-43 of Tezuka et al). It is submitted that the term low conductivity materials in the context of the Tezuka et al disclosure inherently means that the connecting plate is made of a material(s) having a lower conductivity than the two blocks.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tezuka (4,548,259) in view of Osborne (5,023,459).

Tezuka has been explained above. To have replaced the insulating region 14 of Tezuka with a layered construction as taught by Osborne at 13 (adhesive), 14 (insulation) and 15(adhesive) to prevent the heater from putting excessive load on the cooler (Osborne, col. 6, lines 17-26) would have been obvious given that these

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insulating regions in Osborne perform essentially the same function as the corresponding insulating region in Tezuka et al (described above) and Osborne's construction, advantageously, appears to be a little less complicated to construct.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Potter et al. (5,819,842) in view of Kasman (5,459,300) or Dutertre et al. (5,161,609) Figure 4 or Kishimoto or WO 91/07504 or JP 5-168459 or GB 2261111.

Potter discloses all of the claimed features except recesses in the top plate as conceded in applicant's last response, based on a failure to argue any other purported deficiency in Potter. See 37 CFR 1.111 (b), reply must: "specifically point out the supposed errors in the Examiner's action".

In Potter, a high thermal capacity metal cold block 25 is cooled by thermoelectric cooler 26. A connecting plate 24 (made of "an insulator composed of plastic loaded glass fiber, ceramic alumina or aluminum nitride, glass or plastic...") connects the heating block 22 and the cold block 25. At least some, if not all, of the enumerated materials for the connector plate 24 have a thermal conductivity lower than that of the cold block 25 and the heating block 22. The upper surface of the heating block 22 serves as a sample container holder (either directly or with the assistance of the, optional, spreader plate 21).

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Potter is specifically designed with a flat upper surface heater (21 or 22) to heat a flat-bottomed micro-titration plate.

As pointed out by Kasman in col. 1, line 20 – col. 2, line 32, incorporated here by reference, such micro-titration plates can come with anyone of flat, (like Potter), U-shaped or V-shaped bottoms.

If one of ordinary skill in this out wanted to use Potter's system to heat/cool a U-shaped or V-shaped bottom micro-titration tray, rather than a flat-bottomed one, he/she would have found it obvious to have shaped the upper surface of the heater of Potter (i.e. 21 or 22) with a U-shaped or V-shaped recess to have received the corresponding type (i.e. U-shaped or V-shaped) of titration tray. Such shaping of the upper surface of the heater is fairly taught by any one of the cited secondary references.

Such construction is fairly shown in Kasman (element 14), Datertre et al (Figure 4), Kishimoto (Figure 7), WO '504 (Figure 1, element 12), JP '459 (Figure 1, element 3), or GB '111, element 4, described on page 5, line 31 –page 6, line 5, incorporated here by reference. In favor of using a large number of secondary references to teach the notoriety of a feature, see In re GPAC, 35 USPQ2d 1116 (Fed. Cir. 1995) and In re Gorman, 18 USPQ2d 1885 (Fed. Cir. 1991).

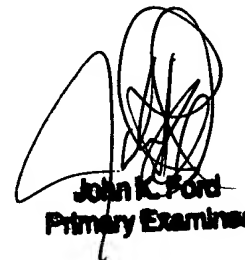
Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to John K Ford at telephone number 703-308-2636.



John K. Ford
Primary Examiner